



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,236	12/31/2001	Ralph Anderson	KCC 4779 (K.C. No. 17,026	7312
321	7590	07/26/2006	EXAMINER	
SENNIGER POWERS ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102				HALPERN, MARK
		ART UNIT		PAPER NUMBER
				1731

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/039,236	ANDERSON ET AL.	
	Examiner Mark Halpern	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 21 June 2006.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-24 is/are pending in the application.

4a) Of the above claim(s) 10, 11, 22 and 23 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-9, 12-21, 24 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_\_.

**DETAILED ACTION**

- 1) Acknowledgement is made of Response received 6/21/2006.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 2) Claims 1-9, 12, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kohler (WO 01/18310).

Claims 1-3, 6-7: Kohler discloses process of forming a paper by depositing aqueous pulp suspension on a moving wire, dewatering said suspension thus forming a web sheet. The water content is reduced further to a range from 70 to 30%, thus the moisture content of the sheet before the sheet reaches the dry end is equal or less than 30% (pg. 4, lines 19-32). A solution containing polyethylene glycol, having a molecular

weight less than 800 (pg. 6, lines 16-20) is applied topically to the sheet when the sheet is of moisture content between 40 and 30% (pg. 13, lines 13-16). The web is then dried at a temperature range from 100 to 250 °C (pg. 14, line 1) with hot air (pg. 13, lines 32-35). It would have been obvious, to one skilled in the art at the time the invention was made, that the hot air drying of Kohler include hot air passing through the web, since Kohler teaches that other heating systems may be used.

Claims 4-5: The polyethylene glycol is added in amounts from about 0.3 percent (Example 2, pg 21) to about 14 percent (Example 1, pg 19).

Claims 8-9: the polyethylene glycol content is up to 50% (Pg. 9, lines 24-27).

3) Claims 13-21, 24, are rejected under 35 U.S.C. 102(a) as being anticipated by Kohler.

Claims 13-20: Kohler discloses process of forming a paper by depositing aqueous pulp suspension on a moving wire, dewatering said suspension thus forming a web sheet. The water content is reduced further to a range from 70 to 30%, thus the moisture content of the sheet before the sheet reaches the dry end is equal or less than 30% (pg. 4, lines 19-32). A solution containing polyethylene glycol, having a molecular weight less than 800 (pg. 6, lines 16-20) is applied topically to the sheet when the sheet is of moisture content between 40 and 30% (pg. 13, lines 13-16). The web is then dried at a temperature range from 100 to 250 °C (pg. 14, line 1) with hot air (pg. 13, lines 32-35). The polyethylene glycol is added in amounts of 0.3 percent based on weight dry fiber material (Example 2, pg 21, lines 10-11).

Claim 21: the polyethylene glycol content is up to 50% (Pg. 9, lines 24-27).

Claim 24: spray application of polyethylene glycol is disclosed in Example 1, Pg. 19.

***Response to Amendment***

4) Applicant's arguments filed 6/21/2006, have been fully considered but they are not persuasive.

Applicants allege that the cited prior art, Kohler, does not disclose passing heated air of at least 175 °C through the treated web.

Kohler discloses that the web is dried at a temperature range from 100 to 250 °C by usual drying, for example, with hot air. It would have been obvious, to one skilled in the art at the time the invention was made, that the hot air drying of Kohler include hot air passing through the web, since Kohler teaches that other heating systems may be used.

***Conclusion***

5) **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Halpern whose telephone number is 571-272-1190. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Mark Halpern  
Primary Examiner  
Art Unit 1731